Geneva International Centre for Humanitarian Demining
Centre International de Déminage Humanitaire - Genève

LAND RELEASE AND RISK MANAGEMENT APPROACHES

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Article 5 – AP MBC

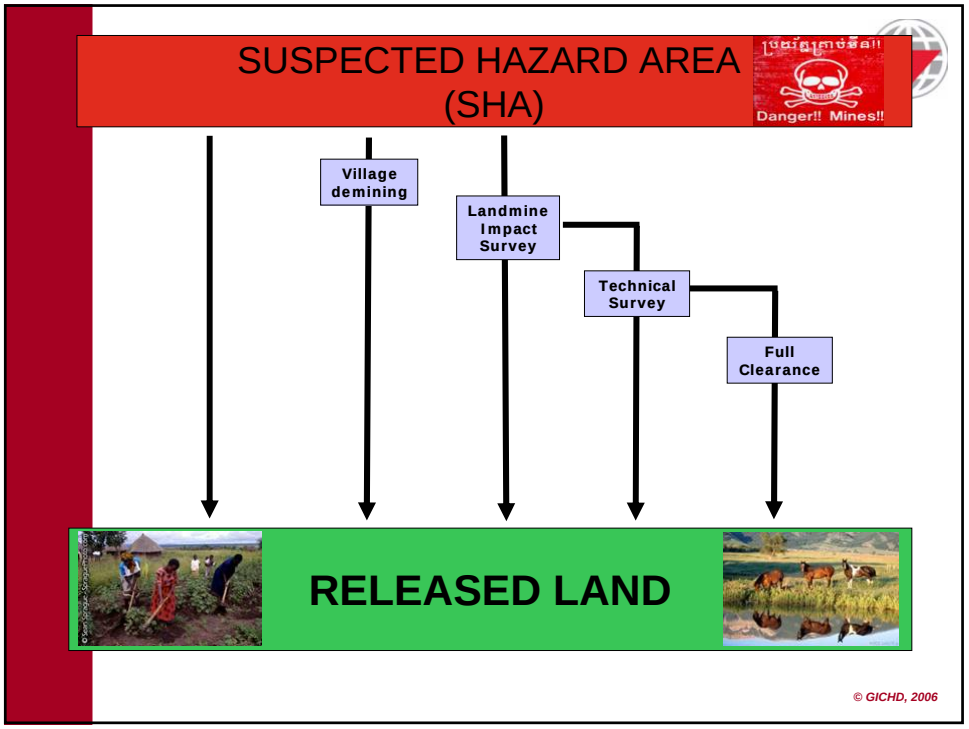
- Identify all known or suspected mined areas.
- Ensure all mined areas perimeter marked, monitored and fenced.
- Destroy all anti-personnel mines in mined areas under its control

Fencing and Marking

- Markings standard set out in CCW AP II
- International Mine Action Standards (IMAS 08.40)
  - IMAS draws on AP MBC and AP II
- GICHD Study on Fencing and Marking
  - Looking at examples / best practice in over 10 countries

The Problem

- General assessments and impact surveys have led to large areas of ”suspect” land, but in reality much less is actually mined
- Anti-vehicle mines and ERW also likely to be present
- Good procedures in place for full clearance, but not land release


SUSPECTED HAZARD AREA (SHA)
Danger!! Mines!!
Village demining
Landmine Impact Survey
Technical Survey
Full Clearance
RELEASED LAND
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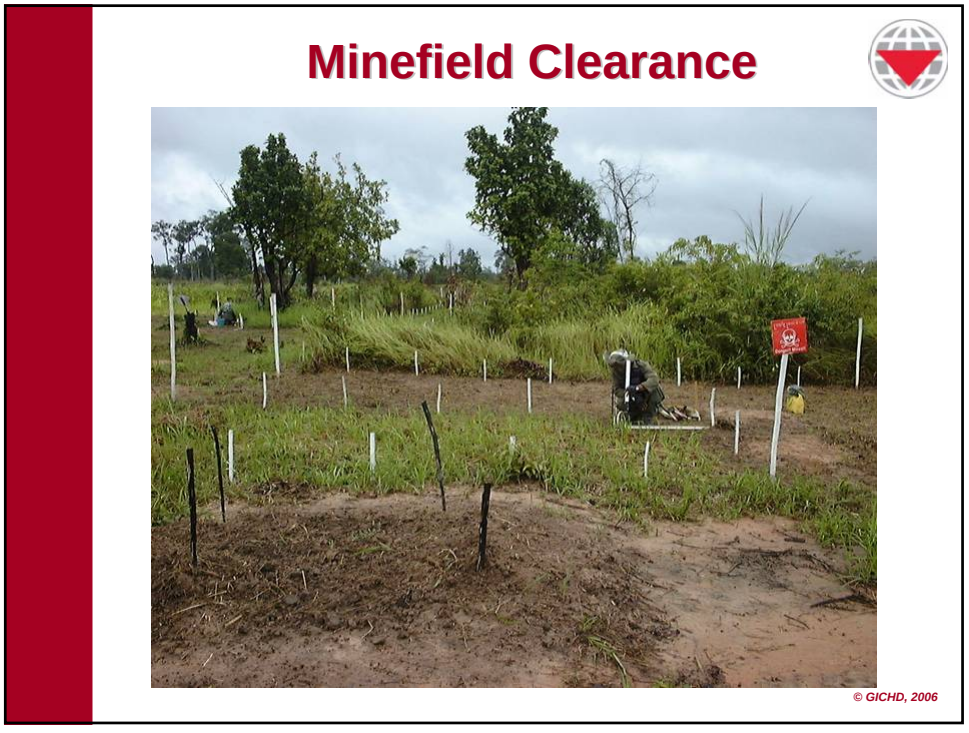
Minefield Clearance
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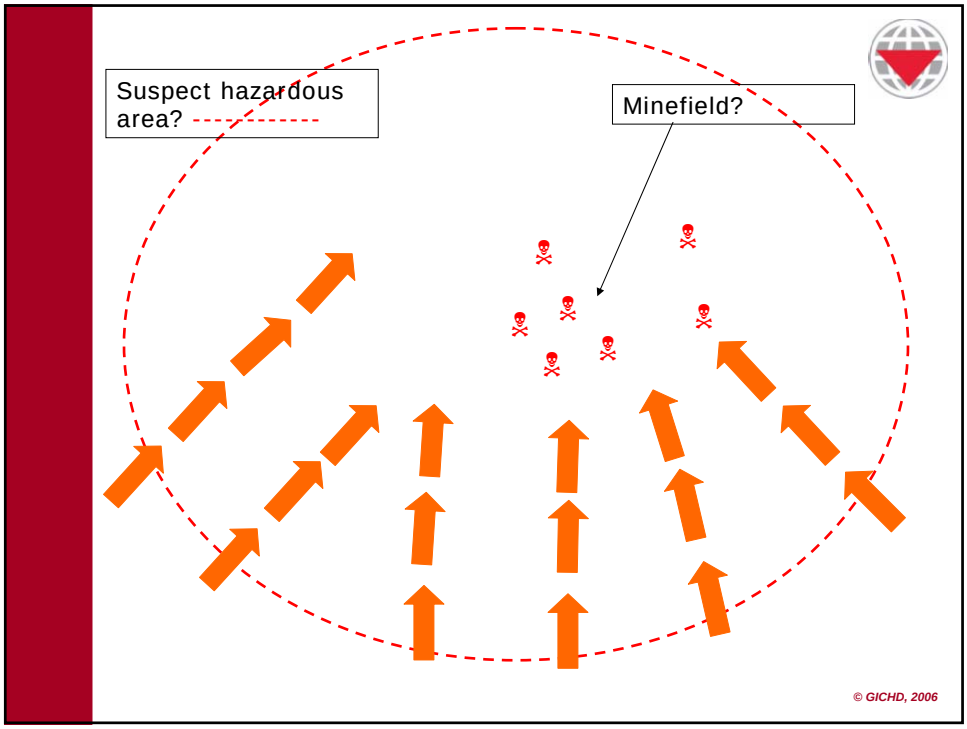
Suspect hazardous area?
Minefield?
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Suspect Hazardous Area?
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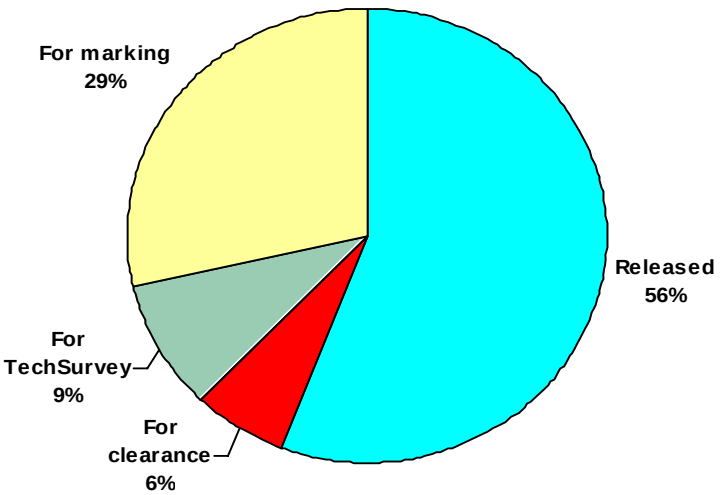
How much land is actually contaminated?

- Kosovo
  - LIS survey – 350km^2
  - Clearance required – 45km^2
- Cambodia
  - LIS survey – 4,466km^2
  - Reality? 10%??

Bosnia – Community based analysis of 14 suspect areas



How to get from Suspect Hazard Area to Known Mined Area ?

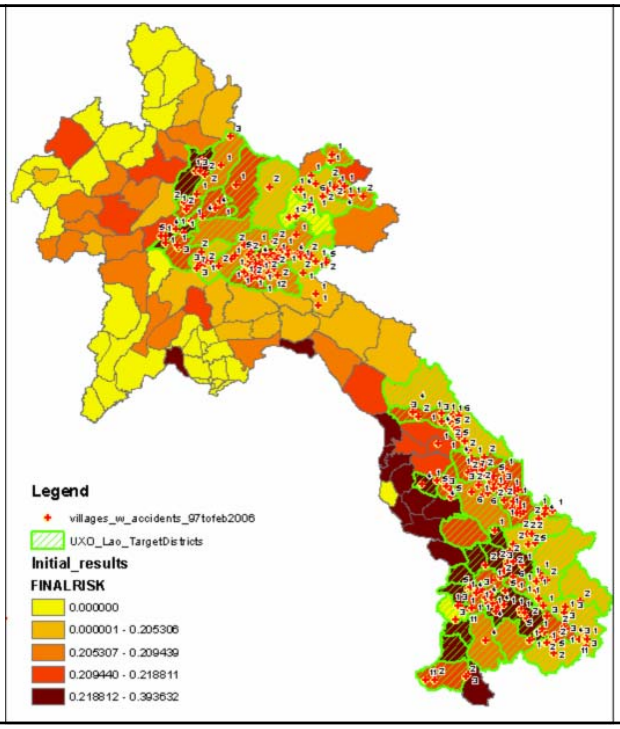
- SHA sq metres locked in database
- Need auditable trail to release land
- To date, only Technical Survey
- A risk management approach will provide additional tools

What is Risk Management?

- A systematic process to
  - identify/quantify risk (survey), and
  - mitigate risk (clearance/technical survey), to
  - tolerable levels (end user acceptance)

Laos – National level

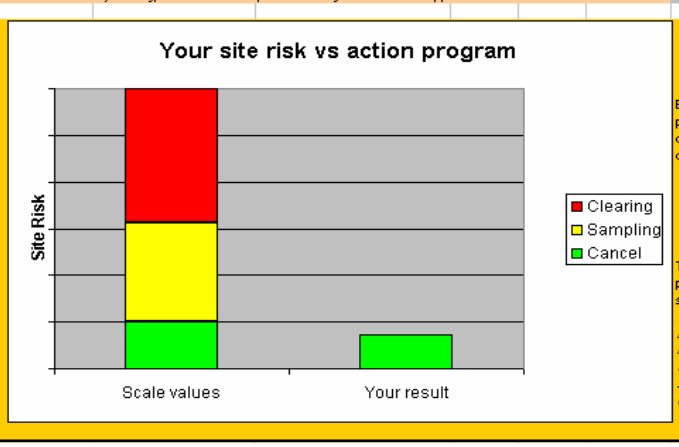
- Thorough analysis of data such as:
  - Population density; Land use; Accidents; Sorties; Intensity of bombing; Type of bombs; Rate of duds; Propensity to detonate; Rate of fatality as a function of distance to detonation; Clearance records
- Results in;



Shall we… or not…(Cambodia)

Decision Making Tools

Field questions		Present situation
QUESTION 1:	a) Did you see/hear of UXO presence on site?	Yes
	b) If "maybe" by whom?	family members, neighbour
	c) If "yes" or "maybe" what type of UXO; If "no" what type of suspected UXO?	Land Service Ammunition
	d) How far is the item from the community?	1km to 1,5km
QUESTION 2:	a) Was there ever an accident on site?	No
	b) If "maybe" by whom?	family members, neighbour
	c) If "yes" or "maybe" what type of UXO; If "no" what type of suspected UXO?	General Purpose Bombs
QUESTION 3:	What has the land been used for?	hospital
	(NB: carefully reply to this question if sampling is performed)	
Office questions		
QUESTION 4:	Does bombing data indicate targets in a 2km radius from site?	Yes
	(NB: requires judgement based on bombing maps (dot analysis only))	
QUESTION 5:	a) Was the bombing heavy?	Yes
	b) What type of ordnance is predominantly recorded as dropped in the area?	Land Service Ammunition



Site Risk

Expresses the likelyhood of UXO(s) potentially on site detonating, combined with a numeric estimate of potential victims.

The plot to the left proposes action programmes as a function of the site risk

NB:small risks may not be visible
NB:if your result is very near to an action program limit jugement should be used to come to a final decision.

Red – "the operator shall undertake full clearance of the area surveyed

Green – "the operator MAY release the area surveyed

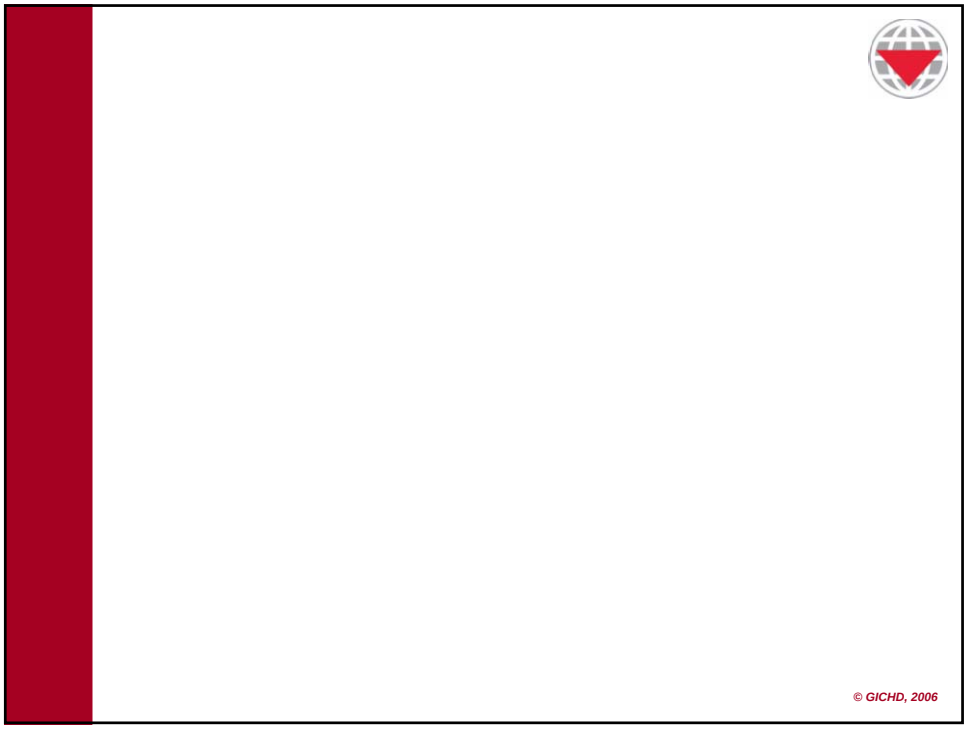
Yellow – "the operator SHALL undertake a process of further investigation

Benefits of a Risk Management Approach

- Standardised methodology for land processing
- Protection for decision makers at all levels
- Ability to make more effective strategic plans
- More effective use of the limited resources available

Risk Management

1. Helps define “known mined areas” more quickly and efficiently
2. Does not imply reduced tolerability towards mine clearance (reduced quality)
3. Clarify liability in case of accidents – part operator, part host country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